Comparison between properties of tricot fabrics that made from ring yarn, open end yarn & vortex yarn*

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Abstract

Ring, Rotor(O.E) and Air vortex spinning systems provide yarns with different structures and properties. Each system has its limitations and advantages in terms of technical feasibility and economic viabilit y Ne 30, 100%cotton yarns were produced from the above systems and knitted in single jersey machine .The Rotor Spun yarns found with frequent breakage during knitting. Comparatively good knitting performances have shown by the Ring and Air vortex yarns. Tensile, evenness and hairiness of the yarns . Bursting strength, abrasion resistance, pilling effect, drapability and color matching of the knitted fabrics were studied. The Ring spun yarns have high strength, low imperfection, and good bursting strength. It has high 'S3'(hairiness) value Abrasion resistance of Rotor and Vortex yarns made fabrics were found higher than the ring spun yarns. Ring yarn knitted fabric has high bursting strength, Air-vortex yarn knitted fabric has poor drape due to stiffer yarn structure and the MVS yarn fabric has poor pilling resistance. Rotor, vortex yarns made fabrics have good abrasion resistance. Drapability of Vortex yarn knitted fabrics was poor than ring and Rotor yarns knitted fabrics. Good and equal depth .of dye shade was found with Ring and Air vortex yarn made knitted fabrics

Key Words : Yarns, knitted fabrics, properties, ring , rotor and air vortex yarns

* For the paper in Arabic see pages (367-377).

** Paper prepared to obtain a Master Degree from Eng.Weaam ALkhateeb. Department of Mechanical Engineering of Textile Industries and Their Technologies, Faculty of Mechanical and Electrical Engineering, Damascus University.

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